

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 11/24/2004

APPLICATION NO. FILING DATE		LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/871,054 05/31/2001		05/31/2001	Stephen R. Van Doren	15311-2232U1	8948	
24267	7590	11/24/2004		EXAMINER		
		ENNA, LLP	NG, CHRI	NG, CHRISTINE Y		
88 BLACK FALCON AVENUE BOSTON, MA 02210				ART UNIT	PAPER NUMBER	
,				2663		

Please find below and/or attached an Office communication concerning this application or proceeding.

		n2K						
		Application		Applicant(s)				
		09/871,05	4	VAN DOREN ET AL.				
	Office Action Summary	Examiner		Art Unit				
		Christine		2663				
Period fo	The MAILING DATE of this communication a or Reply	ppears on the	cover sheet with the c	orrespondence address	S			
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a representation of the period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the mained patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no eve eply within the statu od will apply and wi lute, cause the appl	nt, however, may a reply be tim tory minimum of thirty (30) day I expire SIX (6) MONTHS from ication to become ABANDONE	nely filed s will be considered timely. the mailing date of this commur D (35 U.S.C. § 133).	nication.			
Status	·							
1)[🖂	Responsive to communication(s) filed on 31	May 2001.						
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)	<del>( _</del> _							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)□ 6)⊠ 7)⊠	Claim(s) 1-4 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1 is/are rejected.  Claim(s) 2-4 is/are objected to.  Claim(s) are subject to restriction and/or election requirement.							
Applicat	ion Papers			•				
10)⊠	The specification is objected to by the Exami The drawing(s) filed on 31 May 2001 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction oath or declaration is objected to by the	a) accepte he drawing(s) b ection is require	e held in abeyance. See ed if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.				
Priority	under 35 U.S.C. § 119							
12)[ a)	Acknowledgment is made of a claim for forei  All b) Some * c) None of:  1. Certified copies of the priority docume  2. Certified copies of the priority docume  3. Copies of the certified copies of the priority docume  application from the International Bure  See the attached detailed Office action for a life	ents have bee ents have bee riority docume eau (PCT Rul	n received. n received in Applicati ents have been receive e 17.2(a)).	ion No ed in this National Stag	<b>je</b>			
2) Notice 3) Infor	ot(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 er No(s)/Mail Date	08)	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informat F 6) Other:		:)			

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,751,219 to Lipp et al.

Referring to claim 1, Lipp et al disclose in Figures 7-9 a method for decomposing a multicast transaction (Figure 8A or 9) into multicast messages (Figures 8B-8D) directed to targeted nodes (Figure 7, egress ports 20-25) of a distributed shared memory multiprocessor system (Figure 7), the multicast transaction (Figure 8A or 9) issued by a source node (Figure 7, egress ports 20-25) of the system to acquire data stored on a home node (Figure 7, ingress port 10) of the system. Refer to Column 9, lines 15-33. The method comprises the steps of:

Apportioning the multicast transaction (Figure 8A or 9) into a predetermined number (4) of multicast packets (specified in Figure 8B, destination fields 80 or Figure 9, multicast domain ID 90) at a global port of the home node (Figure 7, ingress port 10). Ingress port 10 attaches a header 70 to each multicast packet, which includes a predetermined number (4) of multicast packets specified in the destination fields 80 or

multicast domain ID 90. Refer to Column 9, line 37 to Column 10, line 3 and Column 10, line 66 to Column 11, line 9.

Forwarding the multicast packets (specified in Figure 8B, destination fields 80 or Figure 9, multicast domain ID 90) to a central switch fabric (Figure 7, switch fabric 28). interconnecting nodes (Figure 7, ingress ports and egress ports). As shown in Figure 7, Ingress port 10 forwards a multicast packet 12 to a random node 38 within switch fabric 38. Refer to Column 9, lines 15-33.

Generating the multicast messages (Figures 8B-8D) from the packets (specified in Figure 8B, destination fields 80 or Figure 9, multicast domain ID 90) at the central switch fabric (Figure 7, switch fabric 28), the multicast messages (Figures 8B-8D) generated according to multicast decomposition (Column 10, lines 37-46) and ordering rules (Column 9, lines 40-48). As shown in Figure 7, random node 38 within switch fabric 38 replicates the multicast packet 12 and produces multiple copies 14 of the packet 12. Refer to Column 9, line 15 to Column 10, line 47.

Distributing the multicast messages (Figures 8B-8D) to targeted nodes (Figure 7, egress ports 20-25). As shown in Figure 7, multicast packets 14 are distributed to egress ports 20-25. Refer to Column 9, lines 15-33 and Column 10, lines 27-28,

## Allowable Subject Matter

3. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 09/871,054

Art Unit: 2663

#### Conclusion

Page 4

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng W November 19, 2004

> CHAU NGUYEN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

Chou T. Muse